Abstract: We measure systemic co-crash dependence, the tendency of markets within a financial system to breach their lower-tail thresholds jointly. The primary statistic averages pairwise finite-threshold co-crash probabilities, so it is comparable across systems of different size, and a same-correlation Gaussian benchmark splits it into correlation-driven interdependence and an excess joint-tail component. We estimate the level nonparametrically; a Bayesian dynamic Student-t copula adds a time-varying path with credible bands and separates the correlation and tail-heaviness channels; and a simulation-calibrated matched-block test asks whether the excess rises during dated crises. In daily data on equities, foreign exchange, credit, commodities, and large U.S. banks, co-crash risk is large and persistent: after allowing correlation to vary, a Gaussian copula understates the probability of a whole-system crash by about a factor of two, and by as much as sixfold when correlation is held fixed. The level is pinned down more sharply than the crisis dynamics. The test finds a lower-tail break beyond Gaussian correlation during COVID-19 and no comparable break in the four other crises.